

CLAIMS

I claim:

1. A retractable sunshade comprising:

a reversible motor capable of rotating in a first direction and a reverse
5 direction;

a control switch connected to said motor;

a gear assembly connected to said motor;

a motor shaft having a first end connected to said motor;

10 a first pair of pulleys connected together by a first wire wherein said wire is
looped around said pulleys like a rubber band and connected to said motor shaft
wherein one of said pulleys is connected to said second end of said motor shaft;

15 a wire attachment having a circular top end with a transverse aperture, an
elongated portion extending downward from said top end, and a circular bottom
end with a transverse aperture and connected to said first wire of said first pair of
pulleys wherein said wire passes through said aperture in said top end;

a flexible shade having a top edge, a bottom edge parallel to said top edge,
a leading edge, and a trailing edge and connected along said leading edge to said
elongated portion of said wire attachment;

20 a second pair of pulleys connected together by a second wire wherein said
wire is looped around said pulleys like a rubber band and connected to said wire
attachment wherein said wire passes through said aperture in said bottom end of
said wire attachment;

25 a first plurality of sliding attachments having a sideways T-shaped base and
a vertically extending clip section and connected on said clip section to said top
edge of said shade wherein said sliding attachments are spaced equidistant along
said shade;

a first elongated block C-shaped guide track having a first end, a second
end, and an interior with a sideways T-shaped opening and slideably connected to
said first plurality of sliding attachments wherein said base of each of said first

sliding attachments resides in said opening of said guide track and is capable of sliding along said guide track;

a second plurality of sliding attachments having a sideways T-shaped base and a vertically extending clip section and connected on said clip section to said bottom edge of said shade wherein said sliding attachments are spaced equidistant along said shade;

a second elongated block C-shaped guide track having a first end, a second end, and an interior with a sideways T-shaped opening and slideably connected to said second plurality of sliding attachments wherein said base of each of said second sliding attachments resides in said opening of said guide track and is capable of sliding along said guide track;

a first hollow rectangular track cover having a first end, a second end, a top, an open bottom, a front side perpendicular to said top, and a rear side parallel to said front side and forming a rectangular hollow interior and connected to said first guide track wherein said guide track is wholly affixed to and parallel to said rear side of said track cover and said first and said second ends are located near said first and said second ends of said guide track, respectively;

a second hollow rectangular track cover having a first end, a second end, a top, an open bottom, a front side perpendicular to said top, and a rear side parallel to said front side and forming a rectangular hollow interior and connected to said second guide track wherein said guide track is wholly affixed to and parallel to said rear side of said track cover and said first and said second ends are located near said first and said second ends of said guide track, respectively;

an elongated shaft having a first end, an elongated central portion, and a second end and connected along said central portion to said trailing edge of said shade, on said first end to said interior of said first track cover, and on said second end to said interior of said second track cover; and

a plurality of mounting screws connected to said first track cover, said second track cover, and said motor.

2. The retractable sunshade of claim 1 wherein said shade is rectangular.
3. The retractable sunshade of claim 1 wherein said shade is scented with a fragrance for enhancing the aroma of the interior of said motor vehicle into which said retractable sunshade is mounted.
4. The retractable sunshade of claim 1 wherein said first pair of pulleys further comprises:
a pulley axle connecting the other of said pulleys to said interior of said first track cover along said rear side near said first end.
5. The retractable sunshade of claim 1 wherein said second pair of pulleys further comprises:
a pair of pulley axles connecting said pulleys to said interior of said second track cover along said rear side wherein one of said axles connects one of said pulleys near said first end of said track cover and said other axle connects said other pulley near said second end of said track cover.
6. The retractable sunshade of claim 1 wherein said sunshade is installed in a motor vehicle and said motor is electrically connected to the battery of said motor vehicle.
7. The retractable sunshade of claim 1 wherein said upper track cover is connected horizontally to the ceiling of said motor vehicle at point just before said ceiling slopes downward to meet the windshield of said vehicle and said lower track cover is connected horizontally to the dash of said vehicle directly below said point where said upper track is connected wherein said lower track cover is parallel to said upper track cover.
8. The retractable sunshade of claim 1 wherein said upper track cover is connected vertically to the forward right interior of said motor vehicle at a point just before

the passenger side door and said lower track cover is connected vertically to the forward left interior of said motor vehicle at a point just before the driver side door wherein said lower track cover is parallel to said upper track cover.

- 5 9. The retractable sunshade of claim 1 wherein said shade is comprised of an opaque material.
- 10 10. The retractable sunshade of claim 1 wherein activation of said control switch causes said motor to reverse directions from the previous said activation of said control switch.
- 15 11. The retractable sunshade of claim 10 wherein said motor turning in said first direction, causing said pulley attached to said motor shaft to turn and rotate said wire toward said motor shaft, causes leading edge of said shade to be pulled toward said motor shaft and subsequently causes said shade to be deployed as said sliding attachments move along said upper and said lower tracks.
- 20 12. The retractable sunshade of claim 10 wherein said motor turning in said reverse direction, causing said pulley attached to said motor shaft to turn and rotate said wire away from said motor shaft, causes said leading edge of said shade to be pulled away from said motor shaft and subsequently causes said shade to be retracted and form pleats as each said sliding attachment moves next to adjacent said sliding attachments at said trailing edge of said shade.
- 25 13. A retractable sunshade comprising:
 a first pair of pulleys having a first pulley formed with a transverse aperture and a second pulley formed with a transverse aperture;
 a first wire loop connected around said first pair of said pulleys;
 a wire connector having a first end formed with a transverse aperture, an elongated shaft, and a second end formed with a transverse aperture and connected
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to said first wire loop wherein said first wire loop passes through said aperture in said first end of said wire connector;

a second wire loop parallel to said first wire loop and connected to said wire connector wherein said second wire loop passes through said aperture in said second end of said wire connector;

a second pair of pulleys having a first pulley formed with a transverse apertures and a second pulley formed with a transverse aperture and connected to said second wire loop wherein said second wire loop passes around said second pair of pulleys;

a flexible, opaque, rectangular shade having a leading edge, a trailing edge parallel to said leading edge, a first edge perpendicular to said leading edge and joining said leading edge to said trailing edge, and a second edge parallel to said first edge and connected along said leading edge to said elongated shaft of said wire connector;

an edge connector having a first end, an elongated shaft, and a second end and connected along said elongated shaft to said trailing edge of said shade;

a plurality of sliding attachments having a vertical clip extending from a horizontal T-shaped connector and connected on said clip to said shade wherein a first portion of said sliding attachments are connected to said first edge of said shade and a second portion of said sliding attachments having a like number of said sliding attachments as said first portion are connected to said second edge of said shade;

a first track guide having a similar length as said first edge of said shade with a flat, elongated rear surface, an elongated downward hooked top surface, and an elongated upward hooked bottom surface forming a horizontal T-shaped opening and connected to said first portion of said sliding attachments wherein said connectors reside in said T-shaped opening;

a second track guide having a similar length as said first track guide with a flat, elongated rear surface, an elongated downward hooked top surface, and an elongated upward hooked bottom surface forming a horizontal T-shaped opening

and connected to said second portion of said sliding attachments wherein said connectors reside in said T-shaped opening;

5 a first hollow rectangular guide cover having a front side, a rear side formed with a length approximately the same as that of said first track guide and parallel to said front side, and a top side perpendicular to said front side and joining said front side to said rear side, and an open bottom forming a hollow interior and connected on said interior of said rear side to said first track guide wherein said first track guide is parallel to said front and said rear sides;

10 a second hollow rectangular guide cover having a front side, a rear side formed with a length approximately the same as that of said second track guide and parallel to said front side, and a bottom side perpendicular to said front side and joining said front side to said rear side, and an open top forming a hollow interior and connected on said interior of said rear side to said second track guide wherein said second track guide is parallel to said front and said rear sides;

15 a motor shaft connected to said first pulley of said first pair of pulleys wherein said shaft passes through said transverse aperture of said first pulley of said first pair of pulleys;

a gear assembly connected to said motor shaft;

20 a reversible motor having a first rotational direction and a second reverse rotational direction and connected to said gear assembly;

a control switch connected to said reversible motor;

25 a first pulley axle having a first end and a second end and connected on said first end to said rear surface of said first guide cover and on said second end to said first end of said edge connector wherein said first pulley axle passes through said transverse aperture of said second pulley of said first pair of pulleys;

a second pulley axle having a first end and a second end and connected on said first end to said rear surface of said second guide cover wherein said second pulley axle passes through said transverse aperture of said first pulley of said second pair of pulleys;

a third pulley axle having a first end and a second end and connected on said first end to said rear surface of said second guide cover and on said second end to said second end of said edge connector wherein said third pulley axle passes through said transverse aperture of said second pulley of said second pair of pulleys; and

a plurality of mounting screws connected to said first guide cover, said second guide cover, and said motor.

14. The retractable sunshade of claim 13 wherein said shade is scented with a fragrance for enhancing the aroma of the interior of said motor vehicle into which said retractable sunshade is mounted.
15. The retractable sunshade of claim 13 wherein said sunshade is installed in a motor vehicle and said motor is electrically connected to the battery of said motor vehicle.
16. The retractable sunshade of claim 13 wherein said first guide cover is connected horizontally to the ceiling of a motor vehicle at point just before said ceiling slopes downward to meet the windshield of said vehicle and said second guide cover is connected horizontally to the dash of said vehicle directly below said point where said first guide cover is connected wherein said second guide cover is parallel to said first guide cover.
17. The retractable sunshade of claim 13 wherein said first guide cover is connected vertically to the forward right interior of a motor vehicle at a point just before the passenger side door and said second guide cover is connected vertically to the forward left interior of said motor vehicle at a point just before the driver side door wherein said second guide cover is parallel to said first guide cover.

18. The retractable sunshade of claim 13 wherein activation of said control switch causes said motor to reverse directions from the previous said activation of said control switch.

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19. The retractable sunshade of claim 18 wherein said motor turning in said first direction, causing said pulley attached to said motor shaft to turn and rotate said wire toward said motor shaft, causes said leading edge of said shade to be pulled toward said motor shaft and subsequently causes said shade to be deployed as said sliding attachments move along said first and said second track guides.

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20. The retractable sunshade of claim 18 wherein said motor turning in said reverse direction, causing said pulley attached to said motor shaft to turn and rotate said wire away from said motor shaft, causes said leading edge of said shade to be pulled away from said motor shaft and subsequently causes said shade to be retracted and form pleats as each said sliding attachment moves next to adjacent said sliding attachments at said trailing edge of said shade.

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